

PATENT

REMARKS

Claim 1-10 are pending in the application. In the aforementioned Office Action, claims 1-6 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Noneman* (U.S. Patent No. 5,887,252).

By this amendment, claims 1-10 have been canceled without prejudice. The Examiner's rejection on claims 1-6 and 9 is thereby avoided. New claims 11-22 are submitted to be patentable over the prior art, including *Noneman*.

To begin with, applicants respectfully submit that the differences between applicants' claims and *Noneman* are substantial and fundamental.

Take claim 11 for instance, claim 11 now recites, *inter alia*, of "tuning to an overhead channel for a broadcast service message." The recitation is amply supported throughout the specification (e.g., see paragraphs [1049], [1069] and [1070]). Briefly stated, the user of a mobile station (MS) desiring to access a broadcast service merely has to tune to the overhead channel for a broadcast service message. The direction of the flow of the broadcast service message is from the base station (BS) to the MS. The mode of delivering the broadcast service message is one to many, that is, from one BS to many MSs.

In contrast, there is no tuning of any sort to any overhead channel in *Noneman*. Instead, in *Noneman*, to access a multicast service, it first begins with the MS calling the multicast service via the BS in a conventional manner (column 4, lines 21-29 of *Noneman*). The direction of the flow of the request message is from the MS to the BS. The mode of delivering the request message is one to one, that is, from one MS to one BS.

Furthermore, claim 11 recites "retrieving from said broadcast service message a plurality of parameters for access of a broadcast channel ..."

PATENT

Noneman does not retrieve any parameters from any broadcast service message because there is no broadcast service message in *Noneman* to begin with. Instead, the user of the MS has to know in advance whether the BS supports the requested multicast service, by first sending a Origination Message (column 4, lines 28-31 of *Noneman*). If the BS does not support any such service, the MS's request is simply ignored (column 4, lines 53-57 of *Noneman*). It is logical to assume that if the user wants an answer or insists on demanding the service, he or she may keep on trying with the same BS or with other BSs. As a consequence, precious air link resources can be tied up. On the other hand, if the request can be fulfilled, the BS sends the necessary parameters to the MS via the Extended Handoff Direction Message (EHDM) (column 4, line 66 to column 5, line 2 of *Noneman*) individually, not by "retrieving from said broadcast message" as claimed by Applicants.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. V. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983). Here, in light of the various distinctive differences as aforementioned, independent claim 11 clearly distinguishes over *Noneman*.

Applicants further submit that claim 11 is nonobvious over the prior art, including *Noneman*.

In the ideal world of unlimited bandwidths, no safeguard is needed with respect to interference with other users. Be it for unicast or multicast usage, a user merely selected a channel and enjoyed uninterrupted usage free of encumbrance. However, in reality, this is far from the case. That is, useable frequency bands are limited. Duplicative use of resources serving no additional purposes should be avoided if at all possible.

For instance, in a multicast or broadcast setting, flow of information is mostly one way, that is, from the multicast or broadcast source to many receivers or subscribers. Nevertheless, the one-way information flow is normally highly data-intensive. For the sake of conserving

PATENT

bandwidths, reverse communications, that is, from the receivers to the broadcast source, should be curtailed as much as possible.

Applicants' claimed invention requires minimal reverse traffic for accessing broadcast or multicast services at the outset. As mentioned before, unlike *Noneman*, there is no need to first initialize a call to make a service request. Rather, the MS merely listens to the overhead channel and retrieves the necessary parameters to access a broadcast channel for receipt of broadcast content.

It should be noted that *Noneman* is fully aware of the need to conserve bandwidth resources. In column 2, lines 16 to 19 of *Noneman*, it is said that "[c]apacity of the reverse link is generally the limiting factor in overall system capacity, so it is important to avoid unnecessary signal transmission on the reverse link." Reverse link is the communication path from the MS to the BS (column 2, lines 8-9 of *Noneman*).

Fully cognizant of the need to conserve resources, *Noneman* nevertheless requires the use of the reverse links by the MSs to send Origination Messages to the BS for as a first step for receiving any multicast service. Even in the alternative embodiment (column 5, lines 55-57 of *Noneman*) in which the BS initiates the call to the MSs, individual forward links are likewise needed for the same purpose.

Applicants' claimed invention requires no such initial call steps as used in *Noneman*. If Applicants' claimed invention were in fact obvious, those skilled in the art surely would have implemented it by now. The fact that those skilled in the art have not implemented the invention, despite the awareness of the need to conserve system resources, indicates that it is not obvious.

For the forgoing reasons, independent claim 11 is submitted to be neither anticipated nor rendered obvious by the prior art.

PATENT

Along the same line of reasoning, independent claims 16, 17 and 22 are also submitted to be patentable over the prior art. For example, in claim 17, there is neither "means for tuning to an overhead channel for a broadcast service message" nor "means for retrieving from said broadcast service message a plurality of parameters for access of a broadcast channel for said broadcast service" found in the prior art.

Claims 16 and 22 are respectively method and apparatus claims directing to the broadcast or transmitting aspect of the invention. Independent claims 16 and 22 are submitted to be patentable for the same reasons that independent claims 11 and 17 are believed to be patentable. Furthermore, claims 16 and 22 recite an additional limitation of including "physical-layer parameters of a broadcast channel." The additional limitation is supported in the specification, for example, in paragraphs [1062] and [1097]. Examples of the physical-layer parameters are shown in FIG. 16 with the accompanied description from paragraphs [1070] to [1078].

Claims 12-15 and 18-21 are dependent claims. Each of the dependent claims 12-15 and 18-21 includes one or more limitations of its respective independent claims 11, 16, 17 and 22, are submitted to be, *a fortiori*, patentable over the prior art.

In the aforementioned Office Action, claims 7 and 8 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over *Noneman* in view of *Lee et al.* (U.S. Patent No. 6,792,048).

As mentioned earlier, claims 7 and 8 have canceled and the Examiner's rejection on these claims is thereby averted.

The cited but non-relied upon references have been studied but found to be less relevant than the relied-upon references.

In light of the foregoing amendment and remarks, new claims 11-22 are submitted to be patentable over the prior art. Applicants believe the application is in condition for allowance. Reconsideration and an early allowance are respectfully requested.

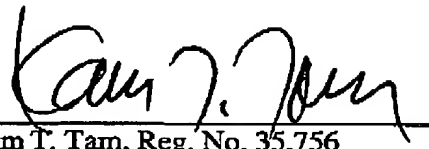
PATENT

In the event of any fees or overpayments that may be due with this response, please charge or deposit the amount to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: May 3, 2006

By:


Kam T. Tam, Reg. No. 35,756
(858) 651-5563

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5787
Facsimile: (858) 658-2502